

chordwise from said leading edge, and

c3  
a second region having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said second laser shock peened surface wherein said deep compressive residual stresses extend from said laser shocked peened surface to a depth in a range of about 20-50 mils into said region.

4. (AMENDED) A component as claimed in claim 2 further comprising:

[pressure and suction side] third and fourth laser shock peened [trailing edge] surfaces extending radially at least along a portion of said trailing edge and extending chordwise from said trailing edge on said pressure and suction sides respectively of said airfoil,

c3  
a [pressure side trailing edge] third laser shock peened region having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said [pressure side] third laser shock peened surface, and

a [suction side trailing edge] fourth laser shock peened region having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said [suction side] fourth laser shock peened surface.

5. (AMENDED) A component as claimed in claim 4 wherein said [pressure side and suction side trailing edge] third and fourth laser shock peened regions extending into said airfoil from said laser shock peened surfaces are formed by simultaneously laser shock peening both sides of said trailing edge of said airfoil.

6. (TWICE AMENDED) A gas turbine engine compressor blade comprising:

a metallic airfoil having a leading edge and a trailing edge and a pressure side and a suction side,

at least [one] a first laser shock peened surface on [at least one] a first side of said airfoil,

said laser shock peened surface extending radially along at least a portion of said leading edge and extending chordwise from said leading edge, and

C4 a first region having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said laser shock peened surface wherein said deep compressive residual stresses extend from said laser shocked peened surface to a depth in a range of about 20-50 mils into said region.

7. (AMENDED) A compressor blade as claimed in claim 6 further comprising:

Pat 104 [a] said first laser shock peened surface located along said pressure side of said leading edge, [and

C5 a first region having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said first laser shock peened surface,]

a second laser shock peened surface located along said suction side of said leading edge and extending radially along at least a portion of said leading edge and extending chordwise from said leading edge, and

a second region having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said second laser shock peened surface wherein said deep compressive residual stresses extend from said laser shocked peened surface to a depth in a range of about 20-50 mils into said region.

Pat 105 11. (TWICE AMENDED) A gas turbine engine compressor blade comprising:

C6 a metallic airfoil having a leading edge and a trailing edge,

at least [one] a first laser shock peened surface on at

least one side of said airfoil,

said first laser shock peened surface extending radially at least along a portion of said trailing edge and extending chordwise from said trailing edge, and

c<sup>6</sup>  
a first region having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said first laser shock peened surface wherein said deep compressive residual stresses extend from said laser shocked peened surface to a depth in a range of about 20-50 mils into said region.

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12. (AMENDED) A compressor blade as claimed in claim 11 further comprising:

[a] said first laser shock peened surface [extending radially at least along a portion of said trailing edge and extending chordwise from said trailing edge] located on a pressure side of said airfoil,

c<sup>7</sup>  
[a first region having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said first laser shock peened surface,]

a second laser shock peened surface extending radially at least along a portion of said trailing edge and extending chordwise from said trailing edge on a suction side of said airfoil, and

a second region having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said second laser shock peened surface.

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Am 16  
c<sup>8</sup>  
16. (TWICE AMENDED) A gas turbine engine compressor blade comprising:

a metallic airfoil having pressure side, a suction side, a leading edge, and a trailing edge

a first laser shock peened surface extending radially at least along a portion of one of said edges on a side of said airfoil extending radially along and chordwise from said one

of said edges,

a second laser shock peened surface extending radially at least along a portion of the other one of said edges on a side of said airfoil extending radially along and chordwise from said other one of said edges, and

<sup>C8</sup> first and second regions having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said first and second laser shock peened surfaces respectively along said leading and trailing edges of said airfoil wherein said deep compressive residual stresses extend from said laser shocked peened surfaces to a depth in a range of about 20-50 mils into said regions.

17. (AMENDED) A compressor blade as claimed in claim 16 further comprising:

a [first pair of] third laser shock peened surface located opposite said first laser shock peened surface such that said first and third laser shock peened surfaces [extending radially at least along a portion of said leading edge] are located along pressure and suction sides of said leading edge respectively,

<sup>C9</sup> a [first pair of] third region[s] having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said [first pair of] third laser shock peened surface[s],

a [second pair of] fourth laser shock peened surface located opposite said second laser shock peened surface such that said second and fourth laser shock peened surfaces [extending radially at least along a portion of said trailing edge] are located along pressure and suction sides of said trailing edge respectively, and

[a second pair of] third and fourth regions having deep compressive residual stresses imparted by laser shock peening (LSP) extending into said airfoil from said [second pair of]